



ANALYSIS OF EARLY IN-PERSON AND MAIL-IN ABSENTEE VOTING IN THE OHIO 2012 GENERAL ELECTION COMPARED TO 2008

A Call for Legislative Action, Based on New Data, to Improve Voter Accessibility and to treat Diverse Counties Fairly

By Norman Robbins¹, Nora Kancelbaum, and Halle Lewis, from the Northeast Ohio Voter Advocates

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SUMMARY OF FINDINGS:

Early In-person Voting

1. The total number of early in-person absentee votes cast in the 75 “smaller” counties (defined as counties with less than 100,000 total votes cast) increased by 33% from 2008 to 2012.
2. The total number of early in-person absentee votes cast in the “larger” counties (more than 100,000 total votes cast) showed almost no increase from 2008 to 2012.
3. As a result of 1 and 2, total in-person early voting as a percent of total votes was similar throughout the state, differing between larger and smaller counties by only 0.6% of the total vote.
4. In-person voting in the 3 days before Election Day was unchanged from 2008 to 2012 in larger counties, but increased in the 75 smaller counties, to the extent that it was about 1% larger than in the larger counties. About one-third of votes cast in these 3 days (about 35,000 votes statewide) were cast on the Monday before election day.
5. Waiting times for in person voting during the last 3 days before election day was related to the number of voters, and even more so to county population: mostly less than 0.5 to 1.0 hour in almost all counties sampled with less than 160,000 population, but between 1-4 hours in all sampled counties with populations over 160,000. Therefore, the statewide uniform rules limiting weekend days, hours, and sites available for in-person voting resulted in unacceptably long waiting times for in-person voters in larger counties.

Vote by Mail

Overall statewide, mail-in absentee votes as a percentage of the total vote increased by only 1% from 2008 to 2012, despite the mailing of absentee ballot applications to all active registered voters. This small increase statewide masked some notable exceptions – namely, several counties with mail-in voting of up to 24-34% of

¹ Contact person: nxr@case.edu

the total vote. As opposed to the total (average) increase of 1%, the median percentage of mail-in voting, which weights every county equally regardless of number of votes, increased by 3%-- still a small amount.

Variation between Counties

The overall statewide trends masked large changes from 2008 to 2012 in both in-person and mail-in absentee voting in some individual counties. Weekends and other times available as well as the number of sites for in-person voting need to be adjusted depending on usage and waiting times. Also, in some counties, mailing unsolicited applications for vote-by-mail ballots appeared to increase participation, whereas in the majority of counties, such applications may not have been cost-effective since they appeared to make little or no difference.

Off-Year Elections

Based on annual elections from 2008 to 2012, early in-person voting in even-year statewide general NON-presidential elections is used by only half as many voters, and in odd-numbered years still much less so. Therefore, legislative rules on hours and days available for early in-person should reflect these expected differences. Mail-in voting declined in 2010 about in proportion to the smaller total vote, but disproportionately declined in 2009 and 2011. Again, legislative rules on mailing applications need to reflect these changes.

Legislative challenges posed by these data and possible rules that take them into consideration are discussed. Based on the vastly different experiences with in-person and mail-in voting in different counties in the 2012 election, a flexible formula-based approach appears to be more equitable, both financially and for the benefit of voters, than the same fixed rules (without offering waivers under specified circumstances) for all counties.

* * *

WHICH OF THESE RESULTS ARE SURPRISING?

The conventional wisdom is that early in-person (EIP) voting, especially in the last 3 days, is the hallmark of larger counties with large African American populations. In fact, in 2012, it was only the smaller counties, with small African American populations, that showed any substantial increase in EIP compared to 2008, notably during the last 3 days before Election Day. Indeed, in 2012, when some extended hours and the last weekend were available for EIP, smaller counties participated statistically significantly more than larger urban counties. Since the smaller counties have a median % of African-American adults of 1.5% in contrast to the 14% of larger counties, it is unlikely that this large increase in EIP and last-3-day voting in smaller counties was related to African American participation.

Conventional wisdom also says that sending applications for voting by mail to all voters will greatly increase votes cast by mail. In fact, although all active voters in all Ohio's counties received applications in 2012, there was overall only a 1% increase in vote-by-mail (although there were several counties that showed larger increases).

Some say that uniform rules should apply for hours of early in-person voting and for vote-by-mail for all 88 counties. **However, the results show large variations among counties in the usage of early-in-person and mail-in voting in 2012, and also large variations between Presidential and non-Presidential elections. The most significant failure of a uniform rule appeared during the last 3 days of in-person early voting, when voters in larger counties were burdened with waiting times of 1-4 hours and voters from smaller counties had relatively short waiting times. Therefore, rules for future Presidential elections need to take into account the varying**

experiences in 2012 in these very different counties, and use formulae that reflect past usage and local variations rather than lock-step rules.

POLICY IMPLICATIONS:

The authors hope that the data reported here will inform upcoming discussions on optimum policy and legislation dealing with in-person and mail-in early voting. This is especially true since some of the findings are counter to what many expected, and also because great diversity in usage and waiting times between counties must be considered (see Tables giving data from individual counties). The right balance must be struck to provide reasonable access to early in-person and mail-in voting without setting low standards for all but also without unfairly placing financial or personnel burdens on counties that appeared to have adequate access. In the following approaches to legislation, the considerations that must go into any legislation are stated first, and second, possible policy options that address these considerations are put forth.

In-person early voting:

Considerations

- The 2012 election proved that early in-person voting is here to stay. It was highly and about equally popular throughout Ohio, including voting on the last weekend before Election Day.
- Prescription of extended or weekday hours should be different for Presidential and non-Presidential elections because in-person voting in non-Presidential elections was reduced by one- to two thirds .
- In larger counties in the Presidential election of 2008², extended weekday and weekend hours were heavily used for in-person voting in the last 2-3 weeks.
- On the last weekend of 2012, waiting times from 1-4 hrs were the rule in almost all larger counties (populations over 160,000 population), which should be unacceptable. With one exception, the sample of smaller counties with populations less than 160,000 had waiting times of less than 0.5 hour.
- Left up to Boards of Elections, decisions on early voting hours often resulted in split votes between the two Democrats and the two Republicans, so that legislative rules are necessary to avoid this situation.

Policy framework and suggestions

The approach proposed here might be dubbed “**benchmark plus majority waiver**” – meaning that all counties should achieve benchmarks such as early in-person voting times with waiting times of 0.5 hour or less, but counties which achieved this in 2012 should not have to add extra sites or personnel for early in-person voting, provided at least 3 of the Board members request a waiver. Counties over 160,000 in population in future Presidential elections could have the same hours on the two-three weekends before elections as all other counties, but would need to supply a one-fold increase in sites and/or personnel for, say, each additional thousand voters in the last weekend, based on 2012 data. For non-Presidential elections, the benchmark on waiting time would be the same but might be achieved by extended weekday hours and just one weekend of

² See Table 4 in "Update, 9-27-12: Does Ohio have "fair" and sensible rules for early in-person (EIP) voting?", available at www.nova-ohio.org

voting hours prior to election day. Again, based on data from previous non-Presidential elections, a majority vote of the Board of Elections could result in a waiver of these extra hours.

Early voting by mail:

Considerations

- HAVA money to pay for mailing of applications to all active voters is probably not going to be available in future elections. Therefore, counties will have to pay for such applications with their own funds.
- Based on 2011 numbers from Cuyahoga county, mailing of unsolicited applications (not including return postage) costs about \$1.03 per voter and saves about \$0.45 processing cost for each voter that returns the bar-coded application (as opposed to manual handling). Also, if vote-by-mail reduces need for some precincts on Election Day, the savings is about \$2,717 per precinct eliminated (including both personnel and amortized machine replacement costs). (The Secretary of State's office could obtain financial numbers of this sort as they apply to a variety of counties). Therefore counties with low returns of completed applications (e.g. 14-16% of total votes, see Tables 7 and 8) in 2012 even though all active voters were mailed applications, would have all the cost but little benefit from processing or consolidation savings. On the other hand, if a "notice of election" is required to be sent to all active voters both for this and for several other reasons (see below), the marginal additional costs of sending these voters unsolicited vote-by-mail applications as part of the same mailing would be less.
- Conversely, counties with high rates of return (e.g. 34% in Cuyahoga County) and with considerable consolidation (368) precincts, could have highly cost-effective benefits.
- Additional benefits of sending applications are greater accuracy of information because of bar-coding, facilitation of voting for those who greatly benefit from vote-by-mail such as disabled or nursing home citizens, prevention of some "wrong-precinct" provisional ballots cast by voters who might have voted in person on election day at the wrong precinct (e.g. because of confusion over consolidation), and ballots which can be pre-counted or readily available for early counting on election day.
- The numbers of mail-in votes cast declined by about one-third in Gubernatorial election years, and about 60% in other non-Presidential years (2009 and 2011). This, too, must enter into the decision as to whether to require mailing of unsolicited absentee ballot applications.
- At least in Cuyahoga County in 2011, voters were very confused as to whether or not they would receive unsolicited vote-by-mail applications in the mail, since they had received them in the prior 5 years. Therefore, it would be preferable to have the same application process (whether sending unsolicited applications or not sending them) consistent within each county in all general elections.

Policy framework and suggestions

Because of wide variation between counties in the response to mailing unsolicited applications (Tables 7 and 8), a formula could be used for the benefit of both voters and BOE finances. It would require counties with heavy use of mail-in voting in 2012 (say, in all counties with over 25% of total votes cast by mail) to send out applications to all voters, while allowing counties with relatively light use of mail-in voting (less than 25% of all votes) to avoid expenditures on unsolicited applications, if that turns out to be highly non-cost-effective. In order to ensure that this formula for sending unsolicited applications for vote-by-mail, is not unduly

burdensome from a cost-benefit viewpoint, waivers on mailing unsolicited vote-by-mail applications would be permitted where at least 3 of the 4 Board of Elections members request such waivers with supporting data. In order to prevent voter confusion, with or without waivers, the same BOE decision on sending unsolicited applications should apply to Presidential and non-Presidential years.

Flexibility and voter information:

Assuming legislation will establish new rules on early in-person and voting-by mail, and given differences to be expected between counties, a post-card similar to the “notice of election” should be sent to all registered voters, explaining each county’s hours and locations for in-person early voting, and its procedure for applying for vote-by-mail ballots. This card could include other important information for voters such as ID requirements, polling location and voting hours on election day (This could be especially important for voters who turn out only once every 4 years for Presidential elections.).

MAJOR FACTS AND DOCUMENTATION: (see footnote to Table 6 for explanation of medians and averages)

Statewide in-person early voting: larger vs. smaller counties.

(Table 1) In-person early absentee votes cast increased from a projected 512,000 in 2008 to 580,000 in 2012 despite 2012 restrictions on both weekends and after-hours available for early voting in 2008.

(Table 1) Almost all of this 68,000 vote increase in in-person early voting in 2012 occurred in the 75 “smaller” counties (with <100,000 total votes cast per county), going from a projected 208,000 in 2008 to 274,000 in 2012, or an increase of 33%. In the 13 “larger counties” (>100,000 total votes cast per county in 2008), the increase in early in-person voting was minimal, going from 303,000 in 2008 to 306,000 in 2012. Thus, in 2012, the difference in the total number of votes cast in larger vs. smaller counties was only 32,000 (306,000 minus 274,000) or only about 0.6% of the total 2012 vote. Despite overall differences in racial demographics and majority partisan preferences, the two groups (larger vs. smaller counties) contribute about equal numbers of in-person votes to the state total.

Table 1. Early In-person (EIP) voting in 2012 compared to 2008

			2008		2012			
		No. of counties	No. of EIP votes cast	EIP votes as % of total votes cast	No. of EIP votes cast	EIP votes as % of total votes cast	Increase in no. of EIP votes from 2008 to 2012	Statistical significance, 2012 vs. 2008, EIP as %total vote
smaller counties	Sample counties	39	119,723	8.5% (median)	158,585	11.5% (median)	38,862	p<0.001*
	Projection	75	208,318		274,352		66,034	
larger counties	Sample counties	11	280,951	8.6% (median)	282,991	9.3% (median)	2,040	Not significant
	Projection	13	303,427		305,630		2,203	
Entire state	Projection	88	511,745	9% (average)	579,982	10% (average)	68,074	

*p<0.001 means that the probability of this result occurring by chance is less than 1 in 1 thousand. In statistical comparisons in some of the following tables (Tables 4 and 6), terms such as p<0.01 or p< 0.05 have a similar meaning (i.e. the probability of this result occurring by chance is 1 in a hundred or 5 in a hundred, respectively).

In-person early voting in larger counties

(Table 2) Although most large counties showed little change in EIP voting, Cuyahoga and Summit counties showed substantial drops compared to 2008, while Franklin county showed an increase. Data from two other larger counties, Warren and Lorain, were unavailable or only available for certain types of results, respectively.

Table 2. Early in-person (EIP) voting data from 2008 vs. 2012: sample including most larger counties

	2008					2012				
County	Total votes cast	# of in-person absentee votes	in-person absentee votes as % total vote	Total all absentee votes cast	EIP votes as % of all absentee votes	Total votes cast	# of in-person absentee votes	in-person absentee votes as % total vote	Total all absentee votes cast	EIP votes as % of all absentee votes
BUTLER	175,132	15,037	9	42,367	35	171,170	20634	12	47,474	43
CUYAHOGA	672,750	54,325	8	273,123	20	650,387	45,395	7	266,964	17
FRANKLIN	564,971	53,447	9	253,686	21	574,610	70,825	12	232,651	30
HAMILTON	429,267	27,007	6	111,445	24	421,997	24,118	6	112,651	21
LAKE	122,793	10,194	8	41,129	25	119,409	6,605	6	42,176	16
LUCAS	221,905	24,557	11	65,254	38	211,824	22,851	11	62,328	37
MAHONING	128,914	10,000	8	41,620	24	122,801	12,699	10	43,534	29
MONTGOMERY	280,746	28,000	10	73,061	38	267,936	29,581	11	82,440	36
STARK	189,796	8,807	5	44,636	20	183,173	11,828	6	52,189	23
SUMMIT	280,841	38,516	14	88,719	43	271,303	27,390	10	91,483	30
TRUMBULL	108,441	11,061	10	25,098	44	102,732	11,065	11	25,152	44
MEDIAN VALUES			9		25			10		30

In-person early voting in smaller counties

(Table 3) In smaller counties, although the general trend was definitely a statistically significant increase in EIP voting, there were notable exceptions in some counties which showed little or no change.

Table 3. Sample of smaller counties, early in-person (EIP) voting data from 2008 vs. 2012

	2008					2012				
County	Total votes cast	# of in-person absentee votes	in-person absentee votes as % total vote	Total all absentee votes cast	EIP votes as % of all absentee votes	Total votes cast	# of in-person absentee votes	in-person absentee votes as % total vote	Total all absentee votes cast	EIP votes as % of all absentee votes
ASHLAND	25,470	2,373	9	6,020	39	24,578	4,018	16	8,671	46
ASHTABULA	45,817	2,227	5	8,442	26	43,745	2,978	7	11,234	27
BROWN	20,476	1,412	7	3,674	38	19,691	1,786	9	4,880	37
CHAMPAIGN	19,155	2,740	14	4,972	55	18,669	2,808	15	5,715	49
CLARK	67,588	9,084	13	16,609	55	65,085	10,061	15	20,742	49
CLERMONT	96,388	6,593	7	26,460	25	97,012	9,190	9	28657	32
CLINTON	19,590	2,500	13	5,303	47	18,329	2,532	14	5,567	45
COLUMBIANA	49,265	1,894	4	7,040	27	46,740	2,726	6	9,919	27
COSHOCTON	17,193	1,078	6	5,437	20	15,988	1,528	10	6,108	25
CRAWFORD	21,448	1,849	9	5,471	34	19,847	2,605	13	6,618	39
DEFIANCE	19,232	2,360	12	4,553	52	18,461	3,125	17	5,989	52
DELAWARE	93,055	6,497	7	32,680	20	99,254	14,553	15	40,145	36
ERIE	41,729	5,324	13	13,875	38	39,908	5,560	14	13,503	41
FAIRFIELD	72,665	4,246	6	25,838	16	72,547	8,111	11	27,522	29
FAYETTE	11,843	1264	11	3,236	39	11,136	1,706	15	3,852	44
GALLIA	13,678	965	7	3,072	31	15,194	1,350	9	3,460	39
GREENE	84,255	8,905	11	22,310	40	83,626	12,314	15	25,577	48
HARDIN	13,318	1,439	11	3,544	41	12,560	1,830	15	3,912	47
HARRISON	7,951	443	6	1,723	26	7,289	550	8	2,147	26
HIGHLAND	19,495	2,994	15	5,907	51	18,032	1,826	10	4,174	44
HOCKING	13,229	1,259	10	4,343	29	12,890	1,821	14	4,752	38
JACKSON	14,505	933	6	3,554	26	13,568	1,673	12	4,740	35
LICKING	83,197	7,176	9	28,142	25	82,085	8,261	10	28,370	29
MADISON	17,723	843	5	5,264	16	17,719	1,475	8	6,018	25
MEIGS	10,602	449	4	1,546	29	10,439	833	8	2,541	33
MUSKINGUM	39,667	4,052	10	12,043	34	37,603	4,399	12	14,007	31
NOBLE	6,366	968	15	2,132	45	6,072	924	15	2,366	39
PAULDING	9,908	1,014	10	2,324	44	9,150	1,390	15	2,907	48
PICKAWAY	24,092	1,732	7	8,041	22	24,372	2,265	9	7,538	30
PORTAGE	78,990	6,013	8	18,783	32	76,776	7,735	10	22,146	35
PUTNAM	18,959	1,346	7	3,695	36	18,612	1,985	11	4,742	42
RICHLAND	61,816	10,009	16	19,785	51	69,988	10,536	15	21,184	50
ROSS	32,426	3,030	9	10,653	28	30,474	3,493	11	11,000	32

SANDUSKY	31,001	2,631	8	6,645	40	29,424	3,234	11	7,325	44
SENECA	27,885	1,824	7	4,820	38	25,609	1,949	8	5,615	35
TUSCARAWAS	43,650	2,717	6	11,440	24	42,052	4,158	10	14,154	29
UNION	25,227	2,664	4	7,912	34	25,762	4,531	18	9,498	48
WASHINGTON	30,538	3,490	11	8,739	40	29,995	4,727	16	9,790	48
WILLIAMS	18,554	1,386	7	4,118	34	17,904	2,049	11	4,596	45
TOTAL	1,347,946	119,723				1,328,185	158,595			
MEDIAN VALUES			9		34			11		39

In-person early voting in the last 3 days before Election Day

(Table 4) Voting during the last Saturday, Sunday, and Monday before election day, as a percentage of total votes or of early-in-person voting, stayed the same on average in the larger counties (i.e. was not statistically different between 2008 and 2012), but increased (from 2008 to 2012) in smaller counties from 1.6 to 2.3% of all votes (a statistically significant result). Also, voting in the last 3 days in smaller counties (as a percentage of total votes) in 2012 was statistically greater ($p < 0.01$) in smaller than in larger counties.

Table 4. Last 3 days of early in-person voting, 2012 compared to 2008

			2008	2012		2008	2012	
		No. of counties	EIP votes in last 3 days as % of total EIP votes cast (medians)		Statistical significance, 2012 vs. 2008	EIP votes in last 3 days as % of total votes cast by all means (medians)		Statistical significance, 2012 vs. 2008
smaller counties	Sample counties	31	20%	19%	Not significant	1.6%	2.3%	$P < 0.01$
larger counties	Sample counties	10	18%	15%	Not significant	1.6%	1.3%	Not significant

(Table 5) In the last 3 days of in-person voting in 2012, in a sample of 17 counties with waiting times less than 1 hour, 16 were smaller counties. However, in a sample of 13 counties with waiting times of 1-4 hours, 9 were larger counties. Waiting times over 1 hour were invariably associated with >1000 voters, but there were also 4 counties with waiting times less than 1 hour that had >1000 voters. County population (column 5 in Table 5) showed an even better correlation with waiting times: all counties with populations <160,000 had waiting times less than 1 hour, but all >160,000 (with Trumbull the exception) had waiting times of 1-4 hours.

(Not in Table 5) Of the EIP votes cast in the last 3 days before election day in 2012, about 33% (in 21 smaller counties) and 38% (in 10 larger counties) were cast on the Monday before election day. Projected statewide, about 35,000 votes were cast in-person on the Monday before election day.

Table 5. "longer" waiting times during the last 3 days of early in-person voting in 2012

L="larger" county, >100,000 votes	county	"longer" waiting times (hours)	# votes cast in-person in the last 3 days before election day	County Population (2010 census)	information source (see footnotes below table for reference)
	SENECA	<0.5	228	56,745	12
	MADISON	<0.5	292	43,435	1
	BROWN	<0.5	354	44,846	12
	CRAWFORD	<0.5	378	43,784	12
	HARDIN	<0.5	381	32,058	12
	COSHOCTON	<0.5	415	36,901	12
	DEFIANCE	<0.5	477	39,037	12
	COLUMBIANA	<0.5	519	107,841	12
	PICKAWAY	<0.5	579	55,698	1
	ROSS	<0.5	717	78,064	12
	MUSKINGUM	<0.5	857	86,074	12
	UNION	<0.5	897	52,300	1
	ERIE	<0.5	1,080	77,079	12
L	TRUMBULL	<0.5	1,336	210,312	12
	RICHLAND	0.5	1,687	124,475	10
	CHAMPAIGNE	0.67	456	40,097	12
	CLARK	0.75	1,561	138,333	12
L	STARK	1	1,446	375,586	12
L	MONTGOMERY	1	5,325	535,153	11
	DELAWARE	1.5	2,730	174,214	1
L	LAKE	2	1,049	230,041	6
L	MAHONING	2	1,506	238,823	5
	GREENE	2	1,919	161,573	4,11
L	SUMMIT	2	4,109	541,781	6,8
L	CUYAHOGA	2	8,489	1,289,122	2
L	FRANKLIN	2	12,899	1,163,414	4
	PORTAGE	2.5	1,273	161,419	12
	LICKING	3	1,135	166,492	1
L	LUCAS	3	3,426	441,815	7
L	HAMILTON	4	3,529	802,374	3,9

Information sources for Table 5

1. <http://www.dispatch.com/content/stories/local/2012/11/06/68989-vote-early-in-franklin-county.html>
2. <http://www.thenation.com/blog/171043/obamas-ohio-early-voting-advantage>

3. <http://www.wlwt.com/news/local-news/hamilton-county/Turnout-strong-as-early-voting-winds-down/-/13550662/17270824/-/gl48ox/-/index.html>
4. <http://www.wlwt.com/news/politics/Thousands-line-up-for-last-weekend-of-Ohio-early-voting/-/9837768/17267474/-/53eugt/-/index.html>; <http://thinkprogress.org/justice/2012/11/05/1142411/ohio-early-voting/>
5. http://www.wkbn.com/content/news/local/story/Early-Voting-Wraps-Up-for-2012-Election/9zevLyIE-oo_An8LuZKVrg.csp
6. http://www.cleveland.com/metro/index.ssf/2012/11/huge_turnout_long_lines_for_ea.html
7. http://www.toledoblade.com/Politics/2012/11/06/citizens_turned_away_from_early_vote_site.html
8. www.Slate.com/blogs/weigel/2012/11/04/the_early_vote_in_ohio_cincinnati_akron.html
9. <http://wfmj.com/story/20003286/turnout-high-for-weekend-early-voting-in-ohio>
10. <http://pqasb.pqarchiver.com/mansfieldnewsjournal/access/2807985611.html?FMT=ABS&date=Nov+06%2C+2012>
11. <http://thinkprogress.org/justice/2012/11/05/1142411/ohio-early-voting/>
12. Estimate by Board of Elections, upon query

Mail-in early voting, statewide results

(Table 6) Mail-in absentee voting statewide increased only slightly from 2008 to 2012, from 1,277,000 in 2008 to an estimated 1,299,000 in 2012, or an increase of only about 1% votes cast, despite mailing of applications to all active voters. The increase in median % of votes cast was slightly higher (3% difference between 2008 and 2012) than the 1% average overall difference because median values of percentages do not take into account the number of voters in any given county (see explanation, footnote to Table 6). The point remains that little overall difference was made in mail-in voting when applications for mail-in ballots were sent to all active voters. Again, it is important to note variation from this pattern in certain counties (Tables 7 and 8).

Table 6. Early mail-in (absentee) voting in 2012 compared to 2008*

			2008		2012			
		No. of counties	No. of mail-in votes cast	Mail-in votes as % of total votes cast	No. of mail-in votes cast	Mail-in votes as % of total votes cast	Increase in no. of mail-in votes from 2008 to 2012	Statistical significance, 2012 vs. 2008, mail-in as %total vote
smaller counties	Sample counties	39	250,585	16% (median)*	262,801	19% (median)*	12,216	p<0.01
	Projection	75	435,643		453,932		18,289	
larger counties	Sample counties	11	779,187	19% (median)*	782,554	22% (median)*	48,790	P<0.05
	Projection	13	841,522		845,158		52,693	
Entire state	Projection	88	1,277,165	22% (average)	1,299,090	23% (average)	21,925	

*Note that different percentages of “mail-in as % of total votes” occur, depending on whether the median or average is used. The median is the middle percentage in a list of percentages from all counties, which are not weighted by the number of votes cast, i.e. it treats each county as an equal member of the list. The average combines the total votes for all counties to calculate an overall percentage (lowest row), in which case the

results from counties with more voters tend to dominate the results, and therefore can differ from the median results.

Mail-in voting; data in larger and smaller individual counties

(Tables 7 & 8) In 2012, usage of absentee mail-in voting varied enormously between counties, ranging from 14% to 34% of all votes cast. Most counties showed little or no change in mail-in voting between 2008 and 2012, but several showed substantial increases.

Table 7. Larger counties: comparison of (early) mail-in voting between 2008 and 2012 (data unavailable from Lorain and Warren counties)

County	2008					2012				
	Total votes cast	mail-in votes cast	mail-in as % of total votes	total absentee votes cast	mail-in as % total absentee votes	Total votes cast	mail-in votes cast	mail-in as % of total votes	total absentee votes	mail-in as % total absentee votes
BUTLER	175,132	27,330	16	42,367	65	171,170	26,840	16	47,474	57
CUYAHOGA	672,750	218,798	33	273,123	80	650,387	221,569	34	312,387	83
FRANKLIN	564,971	200,239	35	253,686	79	574,610	161,826	28	232,651	70
HAMILTON	429,267	84,438	20	111,445	76	421,997	90,359	21	112,651	80
LAKE	122,793	30,935	25	41,129	75	119,409	35,571	30	42,176	84
LUCAS	221,905	40,697	18	65,254	62	211,824	39,477	19	62,328	63
MAHONING	128,914	31,620	25	41,620	76	122,801	30,835	25	43,534	71
MONT-GOMERY	280,746	45,061	16	73,061	62	267,936	52,859	20	82,440	64
STARK	189,796	35,829	19	44,636	80	183,173	40,361	22	52,189	77
SUMMIT	280,841	50,203	18	88,719	57	271,303	64,093	24	91,483	70
TRUMBULL	108,441	14,037	13	25,098	56	102,732	18,764	18	127,886	15
TOTALS	3,175,556	779,187		1,060,138		3,097,342	1,299,090		1,090,387	

Table 8. Smaller counties: Comparison of (early) mail-in voting in 2008 and 2012

	2008					2012				
County	Total votes cast	mail-in votes cast	mail-in as % of total votes	total absentee votes cast	mail-in as % total absentee votes	Total votes cast	mail-in votes cast	mail-in as % of total votes	total absentee votes	mail-in as % total absentee votes
ASHLAND	25,470	3,647	14	6,020	61	24,578	3,982	16	8,000	50
ASHTABULA	45,817	6,215	14	8,442	74	43,745	8,256	19	11,234	63
BROWN	20,476	2,262	11	3,789	60	19,691	3,094	16	4,880	51
CHAMPAIGN	19,155	2,232	12	4,972	45	18,669	2,907	16	5,715	51
CLARK	67,588	7,525	11	16,609	45	65,085	10,681	16	20,742	68
CLERMONT	96,388	19,867	21	26,460	75	97,012	19,647	20	28,657	73
CLINTON	19,590	2,803	14	5,303	53	18,329	3,035	17	5,567	75
COLUMBIANA	49,265	5,146	10	7,040	73	46,740	7,193	15	9,919	61
COSHOCTON	17,193	4,359	25	5,437	80	15,988	4,580	29	6,108	48
CRAWFORD	21,448	3,622	17	5,471	66	19,847	4,013	20	6,618	64
DEFIANCE	19,232	2,356	12	4,720	50	18,461	2,864	16	5,989	48
DELAWARE	93,055	26,183	28	32,680	80	99,254	25,592	26	40,145	70
ERIE	41,729	8,551	20	13,875	62	39,908	7,943	20	16,494	52
FAIRFIELD	72,665	21,592	30	25,838	84	72,547	18,678	26	26,789	53
FAYETTE	11,843	1,972	17	3,236	61	11,136	2,146	19	3,852	57
GALLIA	13,678	2,107	15	3,072	69	15,194	2,110	14	3,460	62
GREENE	84,255	13,405	16	22,310	60	83,626	13,263	16	25,577	60
HARDIN	13,318	2,105	16	3,629	58	12,560	2,082	17	3,912	71
HARRISON	7,951	1,280	16	1,723	74	7,289	1,597	22	2,147	69
HIGHLAND	19,495	2,913	15	5,907	49	18,032	3,271	18	5,734	52
HOCKING	13,229	3,084	23	4,343	71	12,890	2,931	23	4,752	46
JACKSON	14,505	2,621	18	3,554	74	13,568	2,854	21	4,740	65
LICKING	83,197	20,966	25	28,142	75	82,085	20,109	24	28,370	58
MADISON	17,723	4,421	25	5,264	84	17,719	4,543	26	6,018	50
MEIGS	10,602	1,097	10	1,546	71	10,439	1,708	16	2,541	68
MUSKINGUM	39,667	7,991	20	12,043	66	37,603	9,608	26	14,007	57
NOBLE	6,366	1,164	18	2,132	55	6,072	1,442	24	2,366	65
PAULDING	9,908	1,310	13	2,324	56	9,150	1,517	17	2,907	71
PICKAWAY	24,092	6,309	26	8,041	78	24,372	5,273	22	11,582	52
PORTAGE	78,990	12,770	16	18,783	68	76,776	14,411	19	22,146	55
PUTNAM	18,959	2,349	12	3,695	64	18,612	2,757	15	4,742	73
RICHLAND	61,816	9,776	16	19,785	49	69,988	10,648	15	21,184	55
ROSS	32,426	7,623	24	10,653	72	30,474	7,507	25	11,000	56
SANDUSKY	31,001	4,014	13	6,645	60	29,424	4,181	14	7,325	61
SENECA	27,885	2,996	11	4,820	62	25,609	3,666	14	5,615	74
TUSCAWARAS	43,650	8,723	20	11,440	76	42,052	9,996	24	14,154	75
UNION	25,227	5,248	21	7,912	66	25,762	4,967	19	9,498	67
WASHINGTON	30,538	5,249	17	8,739	60	29,995	5,063	17	9,790	61
WILLIAMS	18,554	2,732	15	4,118	66	17,904	2,547	14	4,596	52
Totals	1,347,946	250,585				1,328,185	262,801			
Median			16		66			19		61

Comparison of early in-person and vote by mail between Presidential and non-Presidential years

(Table 9 and Figure 1) Total voting in 2010 went down about 30% compared to 2008 and 2012, but the number of EIP votes declined by 66%, and in odd-numbered years (2009,2011) by 70-80% compared to the Presidential elections. Mail-in voting as a percent of the total vote stayed about the same, but the absolute numbers of votes declined by about 35% in 2010 and by about 62% in 2009 and 2011, compared to the Presidential years.

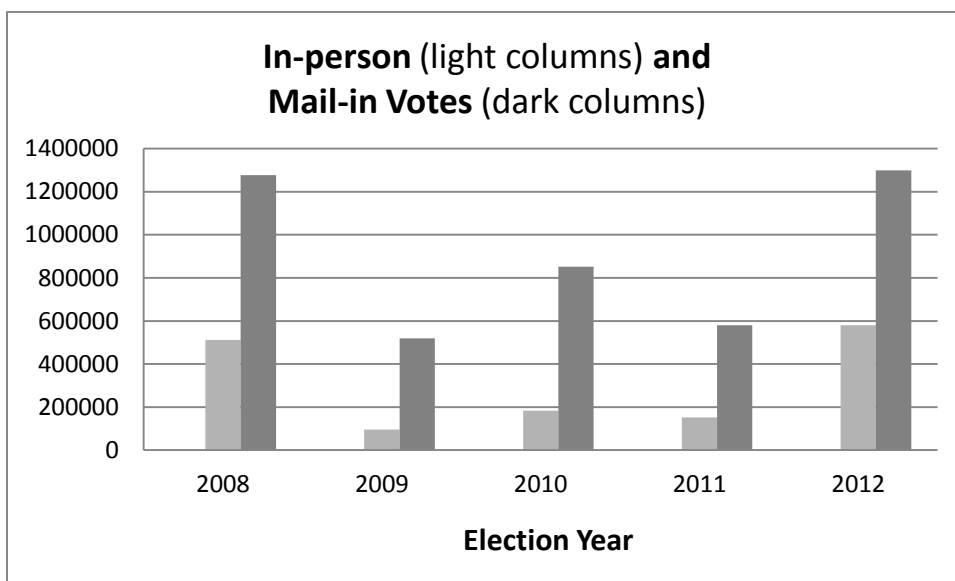
Table 9. EIP and mail-in voting in non-Presidential and Presidential general elections.

Year	Total votes cast	Total votes cast as % of the average number cast in 2008 and 2012	EIP votes	# EIP votes as % of those in Presidential years (average 2008 & 2012)	EIP as % total votes	Mail-in vote	# mail-in votes as % of those in Presidential years (average 2008 & 2012)	Mail-in as % total votes
2008	5,773,774		511,745		9	1,277,165		22
2009	3,292,374	58%	94,638	17%	3	518,868	40%	16
2010	3,956,045	69%	183,104	34%	5	851,936	66%	22
2011	3,628,342	64%	151,909	28%	4	?579,590*	45%	16
2012	5,647,571		579,982		10	1,299,090		23

2009 and 2011 data from Sec. of State website, for “in-country” absentee voting.

*? on 2011 mail-in data because tables on the website use confusing terminology

Figure 1. Column chart of in-person early and mail-in votes in the November elections of 2008 to 2012



METHODOLOGY:

Rounding: numbers in text are rounded to the nearest thousand; numbers in Tables are not rounded.

Use of median vs average: The median is the middle value of a series of values. In the present report, it is used to express the middle value of a series of percentages reported for different counties, thereby giving a “central value” that is not influenced by extremely high or low percentages in a few counties. Thus, if one of these extreme-valued counties had a very large number of votes compared to the other counties, it would have no more weight on the median value than a very small county. In contrast, percentages derived from a simple average could be heavily weighted by larger counties in the group. An average, however, gives valuable information for the total voters in a group (say, for all smaller or all larger counties or for the whole state).

Qualifications: There were frequent discrepancies between data supplied on the Sec of State’s website, data on the website of various counties, and data given in response to queries of individual counties. In almost all cases, these discrepancies were small (1-3%) and therefore unlikely to affect the major conclusions. Also, projections for all 75 smaller counties were made from a sample of 39 smaller counties where data were provided or available, but since these 39 counties represented about 58% of total votes cast in all 75 smaller counties, it is unlikely that the projected conclusions differ more than a few percent from the actual numbers. In the case of larger counties, the projections required only about a 6% adjustment because of missing data from two (Warren and Lorain) counties.

Data sources: Data on total votes cast per county in 2008 and 2012, and for 2012, were obtained from the Sec. of State’s website. Data on early voting in 2008 (reported at www.nova-ohio.org in the report entitled “Update, 9-27-12: Elimination of the last 3 days of early in-person voting...”) had been previously obtained by direct query to Boards of Election since no state-wide source was available for 2008. Individual queries to Boards of Elections produced many of the new data reported here. Data from two larger counties, Warren and Lorain, were unavailable or only available for certain types of results, respectively. In these cases, a projection of results for all 13 larger counties was made, using a multiplier similar to that described below for projecting total results from all 75 smaller counties. Additional early voting and mail-in data for many smaller counties were found on the website, <http://www.voterfind.tzo.org/brownoh/avreport.aspx>, where the county name was substituted for “Brown” in the URL. The total in-person or mail-in votes for all 75 smaller counties were projected from a sample of 39 queried smaller counties, and from a sample of 31 counties in which data for the last 3 days of early in-person were available. The projection used a correction factor in which available data was multiplied by (total votes cast in all larger or smaller counties) divided by (total votes cast in the available sample counties). Data on 2008 total absentee ballots were from the Sec of State website. Some data on 2012 in-person early voting were obtained from the Sec. of State’s website, appended to the press release of Nov. 5 (<http://www.sos.state.oh.us/SOS/mediaCenter/2012/2012-11-05.aspx>). Although these numbers were as of Nov 5, i.e. the numbers did not include mail-in ballots received after Nov 5, but the early-in-person numbers were found to be virtually identical with those supplied later by queries to counties or by the website mentioned above. In the week of Jan 7, 2012, the Secretary of State’s website added numbers for in-person and by-mail voting for 2012. These numbers were similar to those already used in this report, but because the numbers in the report for 2012 were obtained in a similar manner to those for counties in 2008 (which are not available on the Sec. of State’s website), these original numbers for 2012 were retained for purposes of comparison between

results in 2008 and 2012. It is very unlikely that the findings and conclusions would be substantially altered by these different sources of data.

Statistics: All paired comparisons were analyzed with Wilcoxon Signed-Rank or Mann-Whitney tests, and were considered significant if the two-tailed probability of the result occurring by chance was <0.05 .